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ABSTRACT

The study examines factors related to successful implementation of instructional development (ID) projects in higher education. Administrators, faculty and ID staff were asked to rate the importance of 50 success factors in relation to specific projects that they identified. The 50 factors were derived from ID literature, plus data derived in two previous studies. The success factors were then grouped into four broad categories for analysis: faculty initiatives; resources; organizational facilitation; and support staff interpersonal relationships. Correlations between these factor groups and the reported success of projects were examined in order to develop models that could be useful in the prediction of successful ID projects. Preliminary data indicate a strong dependence on faculty initiative and cooperation to make their projects work, whether they are supported by administration and adequate ID staff or not. Development of more powerful models is continuing with the collection of more data and the revision of factor grouping techniques. (Author)

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PREDICTING SUCCESSFUL INSTRUCTIONAL DEVELOPMENT PROJECTS IN HIGHER EDUCATION

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ABSTRACT

Predicting successful implementation for instructional development projects in higher education

The study examines factors related to successful implementation of instructional development projects in higher education. Administrators, faculty and I.D. staff were asked to rate the importance of fifty success factors in relation to specific projects which they identified. The fifty factors were derived from I.D. literature, plus data derived in two previous studies. The success factors were then grouped into four broad categories for analysis: faculty iniatives; resources; organizational facilitation; and support staff interpersonal relationships. Correlations between these factor groups and the reported success of projects was examined in order to develop models that could be useful in the prediction of successful I.D. projects. Preliminary data indicates a strong dependence on faculty iniative and cooperation to make their projects work whether they are supported by administration and adequate I.D. staff or not. Development of more powerful models is continuing with the collection of more data and the revision of factor grouping techniques.

Instructional development skills have for the last ten years been extolled as a means of bringing much needed change to innumerable teaching and learning problems in higher education. Considerable energy has been directed by educators to develop models to assist professional or amateur developers to improve instruction. Such instruction development (I.D.) models, while giving specific advice about the components and variables of the instructional process, have not helped developers change the existing time-honored system of higher education.

Change and diffusion researchers have also developed models and theories. Havelock (1971) and Rogers & Shoemaker (1971), however, are more concerned with the adoptive decision than with the process of implementation within a specific organization. Neither I.D. nor change models are able to prepare the developer to cope with the specific interpersonal and political variables that affect the successful implementation of new programs within an existing institution. Nor can they assist potential developers in predicting the success of their project on their own campus.

Many authorities in instructional design and development have attempted to provide their colleagues with recommendations on the difficult task of I.D. diffusion and implementation. A major difficulty for developers has been in first gaining recognition and rewards for effective teaching. Wilson and Gaff (1975) indicate that 92% of the faculty that they surveyed agreed that teaching effectiveness should be important in promotional standards. However, only 39% of these faculty report that teaching effectiveness is given consideration for promotion, and another 34% report

it is given little or no weight. In their chapter on support for undergraduate teaching, Wilson and Gaff stress the need for faculty, administrators and institutions to support programs and changes in the current reward structure if development is to succeed.

Gropper (1977) also discusses the concern for gaining acceptance for instructional design to improve teaching effectiveness. His comments are based in part on recent experiences at two major Pennsylvania universities. He advises that the developer must be sensitive to bias, fears, and misunderstanding on the part of faculty and administration unfamiliar with the educational change process. The current modes of teaching and decision-making are firmly entrenched, and change should be introduced gradually. Thus, the conditions or context surrounding the introduction of an innovation should make it as easy as possible for faculty to implement. Support staff, resources, and rewards should be used to insure the continuation of the project. Gropper observes that a campus learning resource center with a variety of skills and services should be available to assist faculty. Administrators, faculty senate and faculty promotion committees should set the example in providing fair requirements and rewards for faculty participation in instructional design.

A recent study by Spitzer (1977) on incentives in instructional development analyses sixty responses from developers throughout the United States. Spitzer sought input on the importance of I.D. success factors in four broad categories: direct incentives, organizational facilitation, recognition, and personal satisfaction. Results seemed to indicate that the more than thirty organizational factors were the most developed and easily recognizable success factors. Other categories showed less con-

sistency in response since they dealt with highly personalized variables from both the individual and the institutional standpoint. Spitzer observed that much of the current perception of success in I.D. is based more upon intuition than upon theory. His respondents however did not include faculty from subject disciplines or the administrators involved with implementation. Judgements of respondents were based on cumulative past experience rather than related to specific projects undertaken in a given setting.

Lawrason and Hedberg (1977) attempt to identify and demonstrate interrelations of key I.D. implementation success factors in their pilot study. Factors were first culled from the I.D. literature from such sources as Alexander & Yelon (1972), DeBloois & Alder (1973), Diamond (1974, 1975), Lee (1971, 1972), Lindquist (1975), Popham (1974), Purdy (1975), Stowe (1971), and Whitefield & Brammer (1973). Success factors included such variables as institutional committment, faculty rewards, I.D. skills of the staff, campus resources and services, program evaluation, faculty openness to change, I.D. Center focus, and student attitudes. These initial factors were then expanded by collecting opinions informally from I.D. staff 1.D. graduate students, faculty and administrators. A total of twenty factors were then officially ranked and rated by the same subjects in relation to the ability of each factor to be manipulated by either the I.D. Center or the administration.

Results of this survey indicated that most respondents stressed both admininstrative support for I.D. (particularly through budgets), and I.D. staff skills. Subjects, however, tended to group factors according to highly individual concerns rather than reflecting their own academic role.

Factors clustered into four response patterns: administrative support, I.D. policy, campus climate, and the image of the I.D. Center. A significant observation was that of the dependence of the I.D. Center on the administration in terms of success of projects. Respondents indicated that although the I.D. Center had some control of staff skills and the quality of the instructional products developed, the major success factors such as budgets, rewards, and overall political power were controlled by administrators alone.

Success factors in the Lawrason & Hedberg study however, were similar to those identified in the Spitzer study in that they represented the subjective opinion of individuals and were not related to specific I.D. projects. A follow-up study by Lawrason (1977) attempted to identify more precise success factors in relation to specific I.D. projects in progress. Twentyeight such projects were identified at sixteen different institutions. Project directors were asked questions related to their own academic status and I.D. skills, the project's funding,implementations strategies, and evaluative procedures.

Review of these case studies yielded some revealing observations about the nature of I.D. at a broad sample of institutions in the Delaware Valley region in northeastern United States. First, institutionalized I.D., administered from a central campus office with a professional staff, was almost non existent. In the majority of projects, academic faculty were employed as project directors. Those three institutions that had professional I.D. staff directing project had great difficulties with the implementation or even initial development of the basic project. In all three there was a rapid turnover in the I.D. staff. In one instance the project

was aborted and federal funds let go when it became evident that the political structure of the campus would continually frustrate implementation of the project.

Secondly, a common thread in most of the I.D. projects surveyed was the significant role that both interpersonal and political factors played in the success of the project. It was evident that personal skills rather than I.D. skills appeared to have greater importance in the implementation of the project within the institution. The study revealed the necessity not only to identify and investigate a new range of interpersonal and political factors, but also to examine the interrelationship between all factors as a basis for predicting the success of instructional development projects.

PURPOSE

The current study continues the investigation of variables involved in the successful implementation of instructional development projects in higher education. On the basis of the previous study, it was first necessary to revise the pre-conceived definition of institutionalized instructional development. Rather than looking for only formalized I.D. carried out by trained professionals, I.D. activity was broadened to include any funded curriculum project that had as its objective the improvement of learning experiences, either through revision of existing courses or the development of new ones.

Secondly, it was necessary to refine and expand those success factors identified in the first two studies. Ambigous factors such as "administrative support" required specific definition of behaviors that reflect an

awareness for the subtleties of organizational facilitation. These factors included the interpersonal relationships between the administrator and the project director or other members of the team, as well as between the academic personnel and the support staff.

Thirdly, respondents in the current study would be required not simply to describe success factors, but to rate the overall importance of specific factors in terms of the success or failure of the project have identified.

METHODOLOGY

Subjects were administrators, project directors, faculty and technical support staff involved in I.D. projects at six institutions of higher education in the northeastern United States. Surveys were mailed to those subjects identified in the previous study as well as to new subjects identified through contact with administrators at the institutions.

A three part survey was developed to gather all relevant data. Part I included four general questions about the nature of the project identified:

1. the project size (PSIZE);
2. the academic rank of the respondent (RANK);
3. The part played by the respondent in the project team (PART); and
4. the rank of the person who initiated the project (PINIT).

Part II of the survey consisted of a 50-item questionaire devised to measure the perceived importance of a wide range of I.D. success factors. The factors were developed on the basis of current I.D. literature, plus date derived in two prior studies (Lawrason & Hedberg, 1976; Lawrason, 1977). Respondents were requested to indicate the relative importance of

each of the 50 items identified on a scale of 1 (low priority) to 7(high priority). The factors measured were identified in four overall categories:

1. the importance of the relationship between the support staff and the project members (SUPPORT);
2. the financial incentives or intrinsic motivators available to faculty project members (FACINCEN);
3. the financial resources provided by the administration for the funding of the project (RESOURCE); and
4. the importance of organizational facilitation, i.e., the interpersonal relationships between the administration and project members (ORGFAC).

These four factor groups were analysed as the intervening variables in the study. However, only thirty of the fifty questions were able to be used in the composition of composite variables, since each of the questions had loadings on the factors of greater than .6. The composition of the intervening variables was confirmed by a cluster analysis using the Veldman H group program.

Part III of the survey required respondents first to rate the overall success of their project on the basis of four specific criteria. The final two responses requested subjects to verbally describe the "major factor which facilitated the success" and the "major factor which limited the success" of the project. The four specific criteria by which respondents rated the success of their projects were considered as the dependent variables in the study. They were:

1. a global rating of the overall success of the project (SUCC);
2. the likelihood of project continuation after funds ceased (FUND);

3. the likelihood of project continuation after the original director left (DIR); and
4. the effect of the project upon student enrollments (STUD).

Scores for the composite factor variables (SUPPORT, FACINCEN, RESOURCE, and ORFAC) were used in a standardized form in a regression analysis to determine path co-efficients. On the basis of prior data four overall hypothesis were made concerning the interrelationship of overall variables:

1. organizational facilitation (ORFAC) and administrative financial resource (RESOURCE) factors together would have a significant effect upon the reported success of projects (SUCC);
2. organizational facilitation (ORFAC) and administrative financial resource (RESOURCE) factors together would have a significant effect upon faculty incentives (FACINCEN);
3. the importance of relationships with support personnel (SUPPORT) factors would have a significant effect upon project success (SUCC); and
4. the importance of relationships with support personnel (SUPPORT) factors would have a significant effect upon the success of projects as defined by continuation after funds cease (FUND).

RESULTS

Of the approximately 150 surveys mailed to I.D. project team members only 38 were returned in time to be included in this study. However, since these 38 respondents represented a range of 26 different I.D. projects, it was decided to go ahead with a preliminary analysis of the data.

1. Part I: Nature of Project

The descriptive information relating to project size, academic status and role of the director, and the initiator of the project (PSIZE, RANK, PART, PINIT) was considered as the independent variables in the study. Results are listed in Table 1 in terms of individual responses from the 38 subjects.

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insert Table 1 about here

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2. Part II: Project Success Factors

Within the four clusters of I.D. project success factors (SUPPORT, FACINCE, RESOURCE, and ORGFAC) subjects were required to rate individual factors on a scale of 1 to 7. The means and standard deviations of factors within each cluster are found in Table 2.

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insert Table 2 about here

Part III: Overall Project Success

Responses by subjects to questions about the overall success of their projects (SUCC, FUND, DIR, and STUD) are analysed first in terms of percentages (Table 3). Secondly, responses on these same dependent variables in the study were analyzed through the determination of means and standard deviations for the ratings given (scale of 1 to 7). These are reviewed in Table 4.

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insert Tables 3 and 4 about here

The four hypotheses of the study are demonstrated in the form of simple models in Figure 1. On the basis of the response data collected to date hypotheses one and three cannot be supported, hypotheses two is only partially supported and the fourth was supported, showing a negative correlation.

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insert Figure 1 about here

Breakdown of verbalizations by respondents of the major success and limiting factors is found in Tables 5 and 6. Categories were generated by analysis for these responses after the survey was collected. The cluster of factors here thus reflect the specific concerns identified by the respondents and differ somewhat from those found in the hypotheses of the study.

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insert Tables 5 and 6 about here

DISCUSSION

Of the projects in the study, the majority (31) were larger than a single course indicating that I.D. projects were aimed at a full curricular program rather than specific instructional units. The majority of respondents (21) were tenured faculty, or administrators (11). Only one respondent identified himself as support staff. The lack of response from staff not only makes it impossible to compare input from different status groups, but also indicates a low level of direct involvement by staff. This

finding concurs with evidence of a low level of I.D. support found in the previous study where it was noted that most team members were of academic faculty status.

The survey also further confirmed the important role played by administrators in implementation of projects. A total of 22 of the respondents indicated that their project was initiated by an administrator.

It is interesting to note that no project reported lack of success despite the fact that data on specific projects was actively sought since it had been reported that these projects had failed. Several potential respondents, however, returned their surveys with the explanation that they were no longer involved in the project or thought that it was best "to let sleeping dogs lie". Therefore, no data was available to compare, ratings between factors in unsuccessful projects.

A better measurement of the actual success of projects over time is to be found in the responses as to the future of the project should either funding or the project director be terminated. While 77% reported continuation after funds ceased, only 63.9% were sure that the project would continue after the director departed. Using these two criteria (FUND and DIR) as the dependent measures provides, greater flexibility in terms of considering the "real" outcomes of the projects. While respondents may not admit the lack of success of their project, they indicate a weakness in its implementation if the project is not able to survive a change to regular funding or to another director. However, since many of the respondents were the director/initiator these responses may be more a function of ego than of the real potential for their projects.

The fourth dependent measure used in the analysis was the predicted effect

of the project upon enrollments. In most projects student enrollments were either maintained (40.6%) or increased (50%). When attempting to use this measure as a dependent measure, however, it was found that the organizational climate, support relationships and resources, and incentives available to faculty did not impinge on the enrollment generated by the project. In fact, student enrollment appears to be a secondary consideration in most projects.

Since reported success of the project (SUCC) alone could not be considered a valid response in this study, success of the project in terms of its continuation despite loss of funds (FUND) or director (DIR) was examined. Also, relationships between the independent and intervening variables generally fill into two groups. Thus, two new models were constructed to demonstrate these relationships (Figures 2 and 3). In the first model (Figure 2) three factors act as intervening variables, all concerned with the interpersonal relationships around the project. The relationship between the project team and the support staff affect directly the interpersonal climate of the institution. Moreover, this positive climate affects faculty motivation and incentives to complete the project. Thus, all these intervening variables can be seen as inter-related, and when in place, useful in predicting a successful project.

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insert Figures 2 about here

The other more valid indicator of project success appears to be continuation of the project once funds were discontinued (FUND). Looking at this more mercenary criterion as an indicator of success, the relationship

between intervening variables appear much clearer (Figure 3). The three variables that affect the success of a project if funding ceases can be considered primarily financial and status oriented. The support staff relationships and the financial budgetary sources available for the project would directly affect its success. To a lesser extent the rank of the respondent would affect this dependent measure since it is conjectured that the higher the academic rank of the respondent, the more likely the project will be considered as successful even if funding is cut off.

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insert Figure 3 about here

Thus, the two models in Figures 2 and 3 refute the unsupported first hypothesis shown in Figure 1. The hypothesis included both financial and organizational climate factors. Through analysis of responses it was discovered that the two factors should be seen independently as in Diagrams 3 and 4.

The second hypothesis represented by the second model in Figure 1 relates the organizational facilitation and the resources to faculty incentives. This is partially supported in that the relationship is clear between organizational facilitation and faculty incentives, whereas, there is no indication that the resources significantly affect the motivational climate around the project. In the sample studies, the lack of relation between resources and incentives may be due to the high number of tenured faculty and administrative responses. It would be expected that if the originator of the project was an administrator, then financial resources available to the project would be assured. On the other hand, the

willingness and ability of the institution to facilitate implementation of projects appears to have a demonstrated effect upon incentives. In fact, one respondent described the project's major success factor as the ability to change the traditional course credit structure.

The third hypothesis represented by the third model in Diagram 1 indicates that the relationships between support staff and the project team was useful in predicting overall project success. However, the data indicated that this was not a significant path on the model.

The fourth hypothesis of the study is represented by the fourth model in Figure 1. It stated that the support staff relationships would affect the success of the project as measured by the continuation of the project after funding. This relationship was found to be negative: as support staff relationships improved, project success appears to be doomed. This finding seems odd, but may have several explanations. First, there was only one staff respondent in the survey, perhaps indicating a low level of staff participation in the projects surveyed. The evidence that academics play the major role in I.D. projects seems to confirm data from the earlier studies where few professional staff were involved. The significant role of the faculty member is under-scored in looking at the verbal responses of subjects on the major success and limiting factors.

In considering the most essential factor influencing the success or failure of projects, it is interesting to note that respondents place prime attention on the interest, cooperation and skills of the faculty team members (Tables 5 and 6). Over half of those responding to the question of the most successful factor mention the initiative or skill of the project faculty (11) or director (11). Far fewer list administrative support (7),

support services (4) or even funds (3).

With the limiting factors, responses are more spread out, but lack of faculty interest or skill (10) tops the list. Lack of administrative incentive or support (9) runs second, with lack of funds (7) or time (6) were also major limiting factors.

It is evident that faculty engaged in development projects place the burden of successful implementation upon themselves and their academic colleagues. Thus far this study does not seem to indicate a significant role for the professional developer or others on the support staff. However, the findings of the study are not complete since several problems have arisen in gathering data and analyzing the numerous variables.

One difficulty in the study has been in collecting responses. Surveys were originally sent primarily to faculty members with the instructions to pass out copies to team members. If this was done, the team member tended to be another faculty person rather than staff. With only 38 responses there is insufficient data on which to base fully demonstrated correlations between variables. Work is continuing to reach a wider group of respondents, including staff members who have assisted with the I.D. process.

A second problem has been with the grouping of the intervening variables (success factors) into clusters such as these described in models. Some variables could overlap into more than one cluster. For example, do quality support services belong to the faculty incentive group or to the group involving the administration's provision of financial resources? With the existing grouping procedure not all the success factors could be assigned to a cluster. Furthermore, data from the verbal responses of subjects seemed to indicate a new group of factors relating to the energy,

committment and skill of faculty team members (TGRIT). Thus, work is also continuing in refining the grouping procedures before further analysis is completed. More extensive models demonstrating relationships between major groups of variables have been devised, but until there is further documentation of relationships, they will not be published.

A third difficulty is in the determination of a single measure of reported success of projects. In future analysis a combined score will be examined. Such a score could be determined from weighting the four different project success items included in Part III of the survey. This combined score will then be able to operate more efficiently as a single dependent variable estimating the overall reported success of the project, and thus help to clarify the analysis of the effect of both independent and intervening variables in the study.

Thus, the results of the study remain provisional until more data can be collected from a wider range of respondents, and until further analysis can be made of the groupings of both intervening and dependent variables. However, on the basis found both in the previous studies and in data collected to date, there appear already to be some important implications for educators who are concerned about developmentation of instructional programs in higher education.

EDUCATIONAL IMPORTANCE

It is hoped that the findings of this study will facilitate the implementation of instructional development within higher education. The importance of interpersonal relations throughout the campus at all personnel levels has serious implications for the focus of attention of ID professionals.

First, since administrative and faculty initiative and support for projects appears to have a significant effect, the role of the ID professional seems to be more one of support than of direct leadership. Political and interpersonal skills are thus essential for the ID professional in order to take on this role and to work within the existing campus organizational structure to ensure success for projects. Moreover, graduate ID training programs need to address themselves to the need for interpersonal and political skills as well as ID process skills.

The study also gives hope to those institutions who do not have large professional ID support staffs. Instructional improvement appears to be possible where existing administrators, faculty, and support staff are willling to cooperate and work towards mutually defined project goals. Such a positive campus climate to encourage faculty initiative is also seen as an essential success factor, no matter how strong the professional ID staff may be.

TABLE 1

Responses from part I of the survey*

Independent Variables	Responses	Category
1. Project size (PSIZE)	2	less than one course
	5	one course
	31	more than one course
2. Academic rank of respondent (RANK)	7	senior administrators
	4	department chairs
	21	tenured faculty
	5	non tenured faculty
	1	support staff
3. Project team part of respondent (PART)	22	project director
	3	instructional designer
	11	general support
	2	not members of team
4. Person who initiated project (PINIT)	22	administration
	15	faculty
	1	support staff

*a total of 38 respondents

TABLE 2

Means and standard deviations for success factor groupings*

Intervening Variables	Means	Standard Deviations
1. Importance of relationship with support personnel (SUPPORT)	4.08	1.67
2. Importance of faculty incentives and intrinsic motivators (FACINCEN)	4.52	1.14
3. Importance of financial resources provided by administration (RESOURCE)	4.73	1.42
4. Importance of organizational facilitation; interpersonal relationships between administrators and project members(ORGFAC)	4.41	1.46

*All factors were rated by respondents on a scale of 1 to 7.

TABLE 3

Overall project success
(expressed in percentages)

Dependent Variables	Percentage response	Category
1. Perceived success of project (SUCC)	0	not successful
	32.4	moderately successful
	67.6	successful
2. Success of project if funds cease (FUND)	22.9	unlikely
	77.1	likely
3. Success of project if director leaves (DIR)	36.1	unlikely
	63.9	likely
4. Student enrollments generated by project (STUD)	9.4	reduced
	40.6	maintained
	50.0	increased

TABLE 4

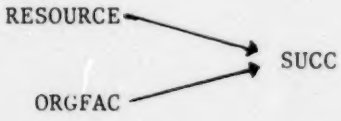
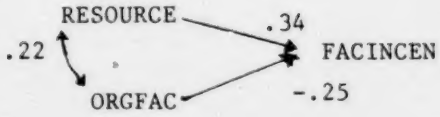
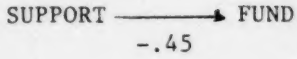
Means and standard deviations of overall project success*

Dependent Variables	Means	Standard Deviations
1. Perceived success of project (SUCC)	5.81	0.94
2. Success of project if funds cease (FUND)	5.54	2.05
3. Success of project if director leaves (DIR)	4.86	2.50
4. Student enrollments generated by project (STUD)	5.31	1.45

*variables rated on a scale of 1 to 7

FIGURE 1

Models of study hypotheses

Hypotheses	Results
Hypothesis 1. 	Not supported
Hypothesis 2. 	Partially supported
Hypothesis 3.	Not supported
Hypothesis 4. 	Supported

Note: Abbreviations for variables are the same as those described in Tables 1-3.

FIGURE 2

New Predication Model Using DIR as Dependent Variable

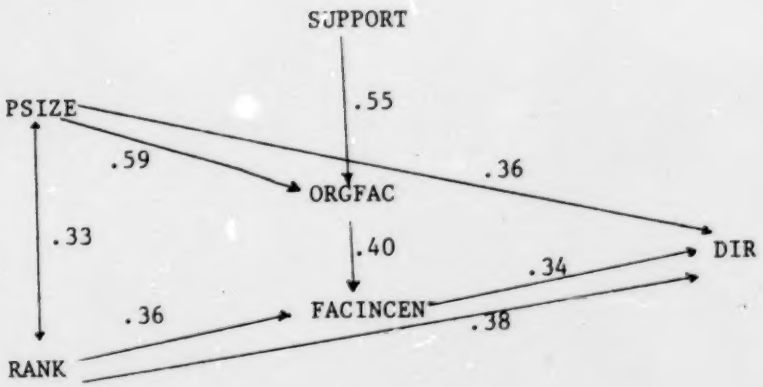


FIGURE 3

New Prediction Model Using FUND as Dependent Variable

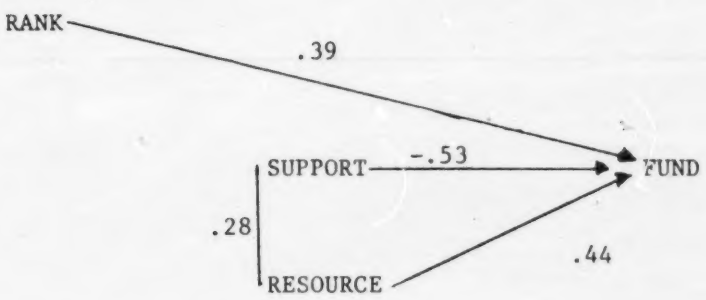


TABLE 5

Major Reported Success Factors

Reported major success factor for I.D. project	Responses
1. Iniative and skill of faculty team members	11
2. Iniative and skill of project director	11
3. Administrative support for project	7
4. Quality of support services provided	4
5. Felt need to provide program	3
6. Funds were provided	3
7. External guidelines (government or grant)	3
8. Student support for project	2
9. Freedom to change present administrative structure	2
10. Prestige of grant	1
	47*

*Note: some of the 38 respondents named more than one 'single' success factor.

TABLE 6

Major Reported Limiting Factors

	Reported major limiting factor for I.D. Project	Responses
1.	Lack of faculty interest or skills	10
2.	Lack of incentives and aministrative support	9
3.	Insufficient funds	7
4.	Insufficient time	6
5.	Lack of support staff or resources	2
6.	Low ability of students	2
7.	Unclear objectives	1
8.	Newness of project	1
9.	No recruitment of students	1
10.	No reported limiting factor	3
		42*

*Note: some of the 38 respondents named more than one 'single' limiting factor

References

Alexander, L.T. & Yelon, S.L. (Eds.) Instructional Development Agencies in Higher Education. New York: John Wiley & Sons, 1975

DeBloois, M. & Alder, D.D. Stimulating faculty readiness for instructional development: a conservative approach to improving college teaching. Educational Technology, 1973, 13 (7), 16-19.

Diamond, R.M. et al. Instructional development for individualized learning in higher education. Englewood Cliffs, N.J.: Prentice Hall, 1975.

Diamond, R.M. Academic redesign in higher education: a matter of survival. Audiovisual Instruction, 1975, 19(10), 6-8.

Gropper, G.L. On gaining acceptance for instructional design in university settings. Educational Technology, 1977, 17(12), 7-13.

Havelock, R.G. Planning for innovation through dissemination and utilization of knowledge. Ann Arbor: Center for Research on Utilization of Scientific Knowledge, Institute for Social Research, The University of Michigan, 1971.

Lawrason, R.E. & Hedberg, J.G. A systems model for instructional development success factors? Educational Technology, 1977, 17(4), 15-20.

Lawrason, R.E. Politics and diffusion strategies for instructional development in higher education. Paper presented at the Convention of Association of Educational Communications and Technology, Miami Beach, April 1977. Resources in Education, 1977, 12(11). ERIC Document ED 140 769.

Lee, A.M. An administrator's guide to instructional development. Audiovisual Instruction, 1971, 16(10), 18-20.

Lee, A.M. A survey of instructional development programs in higher education. Audiovisual Instruction, 1972, 17(8), 16-17.

Lindquist, J. Instructional services for teaching improvement: combine your change assumptions. Paper presented at the International Conference on Improving University Teaching. University of Massachusetts, Amherst. October 1974.

Popham, W.J. Higher education's commitment to instructional improvement programs. Educational Researcher, 1974, 3(11), 11-13.

Purdy, L. Community college instructors and the use of the new media: why some do and why some don't. Educational Technology, 1975, 15(3), 9-12.

Rogers, E.M. & Shoemaker, F.F. Communication of Innovations. New York: Free Press, 1971.

Spitzer, D.R. Incentives in instructional development. Educational Technology, 1977, 17(8), 17-21.

Stowe, R. A. The critical issues in instructional development. Audiovisual Instruction, 1971, 16(10), 8-10.

Wilson, R.C., Gaff, J.G. et al. College professors and their impact on students. New York: John Wiley & Sons, 1975.

Whitefield, R.D. & Brammer, L.M. Diagnosis and prescription. Journal of Higher Education, 1973, 44(1), 1-13.